

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (previously presented) Peptide nucleic acid (PNA) comprising 12 to 24 nucleotide bases, said peptide nucleic acid being complementary to the antisense strand of human N-myc gene.
2. (cancelled)
3. (previously presented) The peptide nucleic acid (PNA) according to claim 1, in which PNA is conjugated with a carrier that can get through the nuclear membrane of target cells expressing N-myc gene.
4. (currently amended) The conjugated peptide nucleic acid (PNA) according to claim 3, in which said carrier is conjugated [[in]] at 3' end of PNA sequence.

5. (currently amended) The peptide nucleic acid (PNA) according to claim [[3]] 1, in which said carrier is chosen among the following peptide sequences:

SEQ ID NO: 8;
SEQ ID NO: 9;
SEQ ID NO: 10;
SEQ ID NO: 11;
SEQ ID NO: 12;
SEQ ID NO: 13;
SEQ ID NO: 14;
SEQ ID NO: 15;
SEQ ID NO: 16.

6. (cancelled)

7. (currently amended) The peptide nucleic acid (PNA) according to claim [[6]] 1, in which the sense anti-gene PNA (SEQ ID NO: 3) is complementary to [[a]] the exon_2 exon-2 sequence of N-myc gene SEQ ID NO: 3.

8. (currently amended) The peptide nucleic acid (PNA) according to claim [[3]] 1, in which sense anti-gene PNA [[are]] is conjugated in 3' with SEQ ID NO: 8 a nuclear localization signal (NLS) deriving from SV40 virus (peptide sequence SEQ ID NO: 8).

9. (previously presented) A pharmaceutical composition comprising a peptide nucleic acid PNA according to claim 1.

10. (withdrawn) A method to treat genetic diseases comprising the step of using a peptide nucleic acid PNA according to claim 1.

11. (withdrawn) The method according to claim 10, wherein the genetic diseases are tumors associated to the expression of N-MYC protein.

12. (currently amended and withdrawn) The method according to claim 10, wherein the genetic diseases are tumors selected from the group consisting of neuroblastoma, retinoblastoma, medulloblastoma, glioblastoma, astrocytoma or lung small cell tumor, rhabdomyosarcoma and B-type lymphoblastic acute leukemias.

13. (previously presented) The peptide nucleic acid (PNA) according to claim 4, in which said carrier is chosen among the following peptide sequences:

SEQ ID NO: 8;

SEQ ID NO: 9;

SEQ ID NO: 10;

SEQ ID NO: 11;

SEQ ID NO: 12;

SEQ ID NO: 13;

SEQ ID NO: 14;

SEQ ID NO: 15;

SEQ ID NO: 16.

14-17. (cancelled)